

**Amendments to the Specification:**

Please replace paragraph [0001] with the following amended paragraph:

[0001] This is a divisional of ~~co-pending~~ United States ~~patent application serial~~  
~~no. 10/007,349~~ Patent No. 6,746,656, filed on November 7, 2001, ~~now allowed~~, which is  
hereby incorporated herein by reference for all that it discloses.

Please replace paragraph [0069] with the following amended paragraph:

[0069] An embodiment of a method for producing molybdenum carbide 12  
according to the teachings of the invention is illustrated as steps in the flow chart shown  
in FIG. 3. In step 80, the precursor material 14 may be introduced into the reaction  
chamber (e.g., process chamber 34 of furnace 16). As discussed above, the precursor  
material 14 is preferably introduced into the furnace 16 by feeding it into the process  
chamber 34 extending through the furnace 16. In step 82, the process gas 62 may be  
introduced into the reaction chamber (e.g., process chamber 34 of furnace 16). Again, as  
discussed above, the process gas 62 is preferably introduced into the process chamber 34  
and preferably flows therethrough in a direction 28 that is opposite or counter-current to  
the direction 26 that the precursor material 14 is moving through the furnace 16. In step  
84, the three heating zones of the reaction chamber are heated and the precursor material  
moved through the heating zones 20, 21, and 22. In step 85, ~~[[T]]~~the temperature is  
increased at least once by at least 100°C (e.g., as the material moves through the heating  
zones 20, 21, and 22). Accordingly, the precursor material 14 is converted to  
molybdenum carbide 12, as illustrated by step 86 and described in more detail above with  
respect to FIG. 2